



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| | | | | |
|---|-------------|----------------------|-------------------------------------|------------------------|
| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
| 09/930,422 | 08/15/2001 | Peter Ar-Fu Lam | DISPMTI | 1550 |
| 7590 Peter Ar-Fu Lam 20104 Wayne Ave. Torrance, CA 90503 | | 07/30/2009 | EXAMINER BUCHANAN, CHRISTOPHER R | |
| | | | ART UNIT | PAPER NUMBER 3627 |
| | | | MAIL DATE 07/30/2009 | DELIVERY MODE PAPER |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | | |
|------------------------------|--|---|
| Office Action Summary | Application No. 09/930,422 | Applicant(s) LAM, PETER AR-FU |
| | Examiner CHRISTOPHER R. BUCHANAN | Art Unit 3627 |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If no period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(o).

Status

- 1) Responsive to communication(s) filed on 15 April 2009.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-34 and 37-52 is/are pending in the application.
- 4a) Of the above claim(s) 1-5, 19-34, 37-39, 41-48, 50 and 51 is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 6, 7, 9-18, 40, 49 and 52 is/are rejected.
- 7) Claim(s) 8 is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
 3) Information Disclosure Statement(s) (PTO/GS/08)
 Paper No(s)/Mail Date _____
- 4) Interview Summary (PTO-413)
 Paper No(s)/Mail Date _____
- 5) Notice of Informal Patent Application
 6) Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on April 15, 2009 has been entered.

Claim Objections

2. Claim 8 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim Rejections - 35 USC § 101

3. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

4. Claims 6, 7, 9-18, 40, 49, and 52 are rejected under 35 U.S.C. 101. Based on Supreme Court precedent and recent Federal Circuit decisions, a 35 U.S.C § 101 process must (1) be tied to a particular machine or (2) transform underlying subject matter (such as an article or materials) to a different state or thing. In re Bilski et al, 88

USPQ 2d 1385 CAFC (2008); Diamond v. Diehr, 450 U.S. 175, 184 (1981); Parker v. Flook, 437 U.S. 584, 588 n.9 (1978); Gottschalk v. Benson, 409 U.S. 63, 70 (1972); Cochrane v. Deener, 94 U.S. 780,787-88 (1876).

An example of a method claim that would not qualify as a statutory process would be a claim that recited purely mental steps. Thus, to qualify as a § 101 statutory process, the claim should positively recite the particular machine to which it is tied, for example by identifying the apparatus that accomplishes the method steps, or positively recite the subject matter that is being transformed, for example by identifying the material that is being changed to a different state.

Here, applicant's method steps are not tied to a particular machine and do not perform a transformation. Thus, the claims are non-statutory.

The mere recitation of the machine in the preamble with an absence of a machine in the body of the claim fails to make the claim statutory under 35 USC 101. Note the Board of Patent Appeals Informative Opinion Ex parte Langemyer et al.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 3627

6. Claims 6, 7, 9-18, 40, 49, and 52 are rejected under 35 U.S.C. 103(a) as being unpatentable over Spackova et al. (US 4,539,585) in view of Aisaka et al. (US 4,417,401).

Regarding claim 40, Spackova discloses a method of processing a body profile (BP) code describing the physical dimensions of a human body to facilitate garment shopping, the method including the steps of;

(1) specifying the positions of the body to be measured (indicia (74) shown in Fig. 3 specify the position) for defining m different physical dimensional parameters of said human body (the indicia segments (72) and coded indicia (74) are used to define various physical parameters of a subject wearing a form fitting garment, col. 4 line 1+, see Fig. 3),

(2) measuring in length units (x-y-z axes are for dimensions of length, col. 3 line 55, fundamental units of measurement are mass, *length*, and time) a physical dimension of said body to produce m values for each of said m defined parameters (the orientation of each segment (72) and indicia (74) are computer identified (i.e., measured and stored, col. 4 line 7+) and used to provide a body location on which items of apparel should be worn (col. 4 line 18+), wherein orientation includes rotation and *position* (col. 3 line 54+, position is measured in length units), this constitutes measuring the body and producing values for the parameters); and

(3) processing said m values to produce a multiple digits BP code for representing said m values (computer and image processor process orientation information, col. 3 line 12-15, the form fitting garment (71) contains a plurality of coded

segments (72) which are used *in toto* to form a composite image of the garment and, therefore, of the subject's body since the garment is form fitting (col. 4 line 1+), the stored data for the composite image would result in a multi-digit code that represents the particular features (m values) for that body).

The method of Spackova differs from the claimed method in that the body profile code is not explicitly shown to be a compressed code (claim 40) or to include a primary compressed n1 digits code and a supplemental n2 digits code for representing said m values, wherein said n2 digits code further comprises a n3 digits code (claims 6, 7, 9-18 and 49) and wherein the code can be decompressed to reproduce said m values (claim 52).

Aisaka discloses a device for measuring garments and the body of a garment wearer (col. 1 line 60, device rates the body and physique of garment wearer) and teaches using a multiple digit compressed body profile code (No. 5, M, XL, etc., col. 1 line 7-20) to represent the measurements of the garment wearer's body. The various measurements of the body (waist, chest, height, etc.) are "compressed" into a single code (e.g., M or size 42) that represents the overall body profile.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the method of Spackova so that the body profile code is a compressed code, as taught by Aisaka, to make garment shopping easier for individuals that know there body profile code. The examiner further gives official notice that the feature of a compressed body profile code is well-known and commonly used in the art.

Codes for body sizes, such as "Large" or "dress size 4" or "jacket size 42", have been in widespread use for many years.

Regarding claims 6, 7, 9-18 and 49, it would have been obvious to one of ordinary skill in the art at the time of the invention that the different data strings (n1 and n2 codes) could be used for a variety of applications (garment fitting, data manipulation, etc.) all of which are well-known. The particular application selected for the n1 and n2 data strings (e.g., size chart for fitting purposes, enhance resolution, physical dimensional parameter, non-dimensional related information related to said human-body, out of range information of a parameter, etc.) would be a matter of design choice since it has not been shown to serve any particular purpose or solve any stated problem. Regarding claim 52, since the m values are being compressed to produce a BP code by some process, it would be a matter of logic that a similar process could be used to decompress the code to provide the original input quantities. This process is merely arrives at the starting point of having m values, thus does not provide any useful result. The examiner further gives official notice that data compression, decompression and manipulation are well-known in the art. It would have been obvious to one of ordinary skill in the art at the time of the invention to combine these features with the teachings of the prior art since it merely provides predictable results.

Allowable Subject Matter

7. Claim 8 has allowable subject matter over the prior art of record.

Response to Arguments

8. Applicant's arguments filed April 15, 2009 have been fully considered but they are not persuasive. Applicant argues that the prior art references used in the rejection do not disclose all of the recited features of the claimed invention. In particular, applicant argues that the Spackova reference does not disclose the features of the invention as "process steps" as recited in the claims of the instant invention because the invention of Spackova does not carry out the claimed process during normal operation. Also, that the x-y-z axis shown by Spackova measures angular units not length units as claimed. Applicant further argues that the system of Spackova cannot make reliable measurements between indicia because it uses a single camera which would not be able to resolve all of the variables involved. Applicant also argues that the Aisaka reference does not show measuring a human body or a body profile code composed of multiple numerical digits, but merely makes measurements for a garment. Also, that Aisaka does not disclose using a mathematical process to compress body profile data. Lastly, applicant requests that the examiner precisely compare the claim limitations with the disclosed features of the prior art used in the rejection.

The examiner disagrees and stands by the rejection. Spackova describes the design and operation of a system that enables users to preview articles of clothing without actually trying on the article (see col. 3 line 5+, col. 4 line 1+), which is analogous art related to the instant invention. In the examiner's interpretation, this description discloses the design of the system and the operation of the system showing the claimed "process steps" of specifying, measuring, and processing during "normal

operation", as set forth in the rejection above. Normal operation is taken to be that disclosed in the reference. For example, in Fig. 3 the coded indicia (74) are specifying the positions of the body to be measured. A similar argument can be applied to the other recited features.

The examiner points out that the x-y-z axes of Spackova are used to measure rotation and translation (col. 3 line 55+), i.e., they are used to make angular and length measurements. Furthermore, since the fundamental units of measurement are mass, length, and time, it would be obvious to one skilled in the art that the physical dimensions of a body would be measured in length units. In the examiner's view, the invention of Spackova is functional and can perform all of the disclosed actions, including making length measurements. Applicant's assertion that Spackova's invention is non-functional is merely unsupported conjecture. Regarding the Aisaka reference, as stated in the rejection above, this reference is only being used to show a code (related to garments and the *bodies* that wear them) that is a compressed code. The examiner notes it is stated (col. 1 line 60) that the device can rate the body form and physique of a garment wearer, thus it can measure a human body. Aisaka gives examples of standard compressed codes (No. 9, etc., col. 1 line 7-11) which are all single digits. However, these are merely examples, and one skilled in the art could logically assume that there is also a size 10, a size 11, and so on, which are multiple digit numerical compressed codes. Furthermore, the examiner notes that the instant application does not actually claim compressing body profile data using a mathematical process, so there is no need for the references to disclose this feature. Lastly, the examiner notes that

the rejection above clearly equates the disclosed features of the prior art with the recited features of the claimed invention, points out the location in the prior art where these features can be found, and describes the examiner's interpretation of how these features are equated. Applicant apparently wants a one-to-one, verbatim matching between the instant claims and the prior art. However, this is not possible due to differences in terminology, the nature of the rejection (which combines teachings from multiple references in this case), and actual differences in the inventions themselves. No amount of explanation or comparison can overcome a difference of opinion held between the examiner and applicant regarding the interpretation of what is being claimed and what is disclosed by the prior art.

Conclusion

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHRISTOPHER R. BUCHANAN whose telephone number is (571)272-8134. The examiner can normally be reached on Mon.-Fri. 9:00am - 5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ryan Zeender can be reached on 571-272-6790. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/C. R. B./
Examiner, Art Unit 3627

/F. Ryan Zeender/
Supervisory Patent Examiner, Art Unit 3627